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2 a disk having at least one side with a plurality of tracks, each track including
3 at least one group of sectors, each sector within said group includes a first field and
4 a second field, the first field in each sector identifying a value in the corresponding
5 second field, each value in the second field of each sector providing a portion of
6 position information, the values in the second fields within the group of sectors, in
7 combination, providing the position information [a burst in a servo field which
8 corresponds to a portion of track position information, said plurality of portions of
9 track position information in the corresponding plurality of sectors within said
10 group are combined to provide a track position of a corresponding track].

1 2. (Amended) The disk as recited in claim 1, wherein each track
2 including at least one group of consecutive sectors [said plurality of bursts are
3 located on consecutive sectors].

1 3. (Amended) The disk as recited in claim 1, wherein each sector within
2 said group including a third field identifying a track position of the disk, the first
3 and second fields in the group of sectors, and the third field in one of the sectors, in
4 combination, providing complete position information of the disk [2, wherein each
5 servo field in each sector includes a second burst that provides a sector sequence
6 number identifying the sequence position of each of said consecutive sectors].

1 4. (Amended) The disk as recited in claim 1, wherein when the first field
2 in a sector is at a first value, the corresponding second field identifies a quadrant of
3 the disk [each track includes at least one group of six sectors].

1 5. (Amended) The disk as recited in claim 4, wherein when the first field
2 in a sector is at a second value, the corresponding second field identifies a side of the
3 disk [the six sectors are in consecutive order].

1 6. (Amended) The disk as recited in claim 5, wherein when the first field
2 in a sector is at a third value, the corresponding second field identifies higher order
3 bits of position information [each servo field in the six sectors includes a second
4 burst that provides a sector sequence number identifying the sequence position of
5 each of said consecutive sectors, said plurality of portions of track position
6 information and the corresponding sequence number in the consecutive six sectors,
7 in combination, providing a position of a corresponding track].

1 7. (Amended) The disk as recited in claim 1, wherein the first field in one
2 sector within the group of sectors is at a first value to identify the corresponding
3 second field as a quadrant of the disk, the first field in at least one additional sector
4 within the group of sectors is at a second value to identify the corresponding second
5 field as a side of the disk, and the first field in at least another additional sector
6 within the group of sectors is at a third value to identify the corresponding second
7 field as a track position information [a first burst in a first servo field of a first sector
8 provides a quadrant position of said disk].

1 8. (Amended) The disk as recited in claim 7, wherein the combination of
2 values in the second fields of the sectors within the group providing the quadrant,
3 side, and track of the disk [1, wherein said disk has a second side with a second
4 plurality of tracks, wherein each track on each side of said disk includes at least one
5 group of sectors each having said burst in said servo field corresponding to a
6 portion of track position information].

1 9. (Amended) The disk as recited in claim 1, wherein the second field in
2 a first sector within the group providing a quadrant of the disk, the second fields in
3 second and third sectors within the group providing a side of the disk, and the
4 second fields in fourth, fifth, and sixth sectors within the group providing higher
5 order bits of a track position, each sector within the group further including a third
6 field identifying lower order bits of the track position [8, wherein a first burst in a
7 first servo field of a first sector and a second burst in a second servo field of a second
8 sector providing a first portion and a second portion of disk side position
9 information, respectively, said first and second portions of disk side position
10 information in combination providing a track position of a side of the disk].

1 10. (Amended) A hard disk drive, comprising:
2 a housing;
3 a spin motor mounted to said housing;
4 an actuator arm mounted to said spin motor;
5 a disk attached to said spin motor, said disk having at least one side with a
6 plurality of tracks, each track including at least one group of sectors, each sector
7 within said group includes a first field and a second field, the first field in each

8 sector identifying a value in the corresponding second field, each value in the
9 second field of each sector providing a portion of position information, the values in
10 the second fields within the group of sectors, in combination, providing the position
11 information [a burst in a servo field which corresponds to a portion of track position
12 information, said plurality of portions of track position information in the
13 corresponding plurality of sectors within said group are combined to provide a
14 track position of a corresponding track]; and
15 a read/write head mounted to said actuator arm for reading said at least one
16 side of said disk.

1 11. (Amended) The hard disk drive as recited in claim 10, wherein each
2 track including at least one group of consecutive sectors [1, wherein said plurality of
3 bursts are located on consecutive sectors of each track].

1 12. (Amended) The hard disk drive as recited in claim 10, wherein each
2 sector within said group including a third field identifying a track position of the
3 disk, the first and second fields in the group of sectors, and the third field in one of
4 the sectors, in combination, providing complete position information of the disk [11,
5 wherein each servo field in each sector includes a second burst that provides a sector
6 sequence number identifying the sequence position of each of said consecutive
7 sectors].

1 13. (Amended) The hard disk drive as recited in claim 10, wherein when
2 the first field in a sector is at a first value, the corresponding second field identifies a
3 quadrant of the disk [wherein each track includes at least one group of six sectors].

1 14. (Amended) The hard disk drive as recited in claim 13, wherein when
2 the first field in a sector is at a second value, the corresponding second field
3 identifies a side of the disk [said six sectors are located consecutively].

1 15. (Amended) The hard disk drive as recited in claim 14, wherein when
2 the first field in a sector is at a third value, the corresponding second field identifies
3 higher order bits of position information [each servo field in the six sectors includes
4 a second burst that provides a sector sequence number identifying the sequence
5 position of each of said consecutive sectors, said plurality of portions of track
6 position information and the corresponding sequence number in the consecutive six
7 sectors, in combination, providing a position of a corresponding track].

1 16. (Amended) The hard disk drive as recited in claim 10, wherein the
2 second field in a first sector within the group providing a quadrant of the disk, the
3 second fields in second and third sectors within the group providing a side of the
4 disk, and the second fields in fourth, fifth, and sixth sectors within the group
5 providing higher order bits of a track position, each sector within the group further
6 including a third field identifying lower order bits of the track position [10, wherein
7 said disk further comprises a second side with a second plurality of tracks, wherein
8 each track on each side of said disk includes at least one group of sectors each

9 having said burst in said servo field corresponding to a portion of track position
10 information; and]

11 [wherein said hard disk drive further comprises a second read/write head
12 mounted to said actuator arm for reading said second side of said disk].

1 17. (Amended) A method for providing servo information on a disk in
2 a hard disk drive, comprising [the steps of]:

3 a) providing a disk having at least one side with a plurality of tracks,
4 each track including at least one group of sectors, each sector within said group
5 including a first field and a second field, the first field in each sector identifying a
6 value in the corresponding second field, each value in the second field of each
7 sector providing a portion of position information [includes a burst in a servo
8 field which corresponds to a portion of track position information];

9 b) reading said first and second fields in the group of sectors
10 [plurality of bursts]; and

11 c) determining position information of the disk in response to reading
12 the first and second fields in the group of sectors [combining said plurality of
13 portions of track position information to provide a track position of a
14 corresponding track].

1 18. (Amended) The method as recited in claim 17, wherein each sector within
2 the group of sectors including a third field, and wherein act c) comprises determining
3 complete position information of the disk in response to reading the first and second
4 fields in the group of sectors, and reading the third field in one of the sectors within the
5 group

6 [step a) further comprises the step of: providing a second burst in each of the
7 plurality of servo fields that provides a sector sequence number identifying the sequence
8 position of each of said sectors;
9 wherein the method further comprises the steps of:
10 reading said second burst in each sector; and
11 combining said plurality of portions and their corresponding sequence numbers
12 to provide a position of a corresponding track].

1 19. (Amended) The method as recited in claim 17, wherein each sector
2 within the group of sectors including a third field, and wherein act c) comprises
3 determining a quadrant, side, and track of the disk in response to reading the first
4 and second fields in the group of sectors, and reading the third field in one of the
5 sectors within the group [a first burst in a first servo field of a first sector providing a
6 quadrant position of said disk].

1 20. (Amended) The method as recited in claim 17, wherein act c)
2 comprises:
3 determining a quadrant of the disk in response to reading the first and second
4 fields in a first sector within the group;
5 determining a side of the disk in response to reading the first and second
6 fields in a second sector within the group;
7 determining higher order bits of a track of the disk in response to reading the
8 first and second fields in a third sector within the group; and
9 determining lower order bits of the track of the disk in response to reading a
10 third field in one of the sectors within the group

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11 [in step a), said disk has a second side with a second plurality of tracks,
12 wherein each track on each side of said disk includes at least one group of sectors
13 each having a burst in servo field, wherein a first burst in a first servo field of a first
14 sector and a second burst in a second servo field of a second sector providing a first
15 portion and a second portion of disk side position information respectively; wherein
16 said method further comprises the steps of:
17 d) reading said first and second portions of disk side position
18 information; and
19 e) combining said first and second portions to provide a position of a side
20 of the disk].
